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# USSR Report

## INTERNATIONAL ECONOMIC RELATIONS

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5 April 1984

USSR REPORT  
INTERNATIONAL ECONOMIC RELATIONS

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LEGAL CONTRADICTIONS IN GRANTING PREMIUMS FOR 'TIMELY' DELIVERIES

Moscow KHOZYAYSTVO I PRAVO in Russian No 12, Dec 83 (signed to press 30 Nov 83) pp 65-68

[Article by P. Kravchuk, chief of the legal department, All-Union "Avtoeksport" Association: "Improve Relations Between Parties in Delivering Goods for Export", under the rubric, "Opinions and Comments"] [Words enclosed in slant bars printed in bold face.]

[Text] Foreign trade is the most important form of economic ties between the USSR and foreign countries.

The foreign trade relations which Soviet foreign trade organizations enter into with foreign firms are closely associated with their relations with Soviet organizations, and in particular with suppliers of goods for export.

The basic source of the law which defines the rights and obligations of the goods suppliers and customers is, The Conditions of Delivering Goods for Export<sup>1</sup>, the many norms of which are subject to various interpretations.

Both in scientific literature and in practice confusion or identification of two differing legal concepts often occurs, namely: "delivery of goods for export" and "shipment of goods for export".

From the very title of the normative act, "The Conditions for Delivery of Goods for Export", it would seem obvious that it should only be a question of delivery of the commodity, and not of shipment. However, in a number of norms both of these concepts are used in one and the same meaning, in spite of their difference not only by linguistic definition<sup>2</sup> but also by their legal nature.

In some points of The Conditions it speaks of "delivery of goods for export" and in others, of "shipment of goods for export", but in certain points both concepts appear at once. For example, in one such point it is stated that, "The supplier has the right to determine the order of priority for /otgruzka/ [shipment] of goods of the same description in accordance with the supply authorization given them. /Postavka/ [Delivery] of goods ahead of schedule is not permitted without consent of the customer".

In practice, identification of these concepts leads to violation of the obligations stipulated in the supply authorization, and also to unnecessary disputes for examination by the state arbitration authorities.

In the section of The Conditions on property responsibility and examination of disputes it clearly describes the responsibility of the supplier for delays in delivery or for delivering less than the required amount of goods.

One of the points of this section fixes the property responsibility of the customer for delay, for which he is to blame, in shipment of goods which had been prepared for shipment by the supplier in accordance with the supply authorization. Supply authorizations establish the periods for delivery, but not for shipment. Therefore the penalty sanctions should be applied against the customer for delaying the supplier in fulfilling his obligation on the periods for delivery established in the supply authorization.

For example, the deadline for delivery of automobiles for export was set for the first quarter, in accordance with the supply authorization furnished to the supplier. If delivery was delayed or the required number of vehicles was not furnished by the deadline specified, the supplier would have to pay a penalty to the customer association. At the same time, the customer's right to present sanctions would take effect only on 1 April, that is, at the expiration of the specified delivery deadline.

In another case, the supplier, in accordance with the above-mentioned supply authorization, manufactured and was prepared to ship the automobiles in January and February; however, there was a ban on shipment from the customer. Under the auspices of The Conditions, the supplier submitted a complaint to the customer in early March, requiring a penalty for delaying dispatch of goods which were ready for shipment. In the given situation, the supplier took advantage of his right to demand payment of a penalty prior to the delivery deadline established in the supply authorization.

These examples testify to the fact that the customer, under the auspices of The Conditions, was proceeding from the concept of "delivery of goods", while the supplier under the auspices of the very same Conditions, was proceeding from the concept of "shipment of goods", although the supply authorization had established a specific delivery deadline.

Thus, confusing the concepts of postavka [delivery] and otgruzka [shipment] when employed in practice, places both the supplier and the customer in an inequitable position with respect to the legal relationships which ensue from delivery of goods for export.

It would seem appropriate in our view to establish in The Conditions a single conception of "delivery of goods for export".

The existing system of legal regulation of deliveries to native enterprises differs from the legal norms which regulate delivery of goods for export. In delivering within the country, the day of fulfilling the obligations for delivery of products and goods is considered:

- a) when delivering the product or goods to a recipient in another city--the day in which the product or the goods are turned over to the carrier or the transportation authorities, which is defined by the date on the shipping document or on the document of the transportation authorities; or,
- b) when turning over the product or goods at the warehouse of the recipient or the supplier (manufacturer)--the date on the acceptance and transfer document or the receipt for the product or goods<sup>3</sup>.

When delivering goods for export, the date fixed for fulfilling the obligations stipulated in the supply authorization is considered the moment of surrender of the goods by the supplier to the customer. In accordance with The Conditions, in practice, the dates fixed for fulfilling the delivery contract are established in the supply authorizations.

Whereas, when shipping goods for export by mail or by air transportation the dates for delivery and shipment coincide, when shipping by other means there is a significant difference. When shipping on a railroad bill of lading via direct international freight transportation and when shipping via domestic railroad bill of lading to a border station, the moment of turnover of the goods (fulfilling the obligation of the supplier for delivery date) is considered the moment the goods are accepted by the foreign railroad from the Soviet railroad.

For example, in accordance with the supply authorization, the supplier must accomplish delivery of the goods via railroad, through the USSR border station, in the first quarter. If the supplier dispatches the goods within the limits of the term specified, specifically by 31 March, but the goods arrive at the border station on 15 April and on that same day cross the USSR border, then the moment for fulfilling the supplier's obligation for date of delivery will be considered the moment the goods are accepted by the foreign railroad from the Soviet, that is, 15 April. In the given situation, the dates fixed for delivery can be any days falling within the first quarter, with the condition that the supplier dispatches the goods taking into consideration the time for delivery from the plant to the border station. One should bear in mind that the date of delivery of the goods to the border station cannot always coincide with the date on which the supplier fulfills his obligations, since the goods may for some reason or other be delayed at the border station because of unsuitability for export (for being incomplete, for damages in shipment, for manufacturing defects, etc.). Therefore, the delivery date will be considered the moment the goods are accepted by the foreign railroad.

When shipping goods to USSR ports where the supplier is not responsible for delivering the goods to the vessel, the date on which the supplier has fulfilled his obligations, as established by the supply authorization, is the moment in which the port accepts the goods from the railroad.

When utilizing other means of shipment, the times for turning over the goods will be determined in a different manner.

The moment in which the supplier turns over the goods to the customer has great legal significance:

--First of all, it fixes the exact date of the supplier's fulfilling the dates for delivery, and in case of their violation, he bears the property responsibility;

--Secondly, this moment determines the transfer of property rights for the goods from the supplier to the customer (the right of operational control) and the risk of accidental loss or spoilage of the goods (Articles 135 and 138, RSFSR Civil Code);

--Thirdly, the obligation arises for the supplier to ascertain at the earliest possible date the defects discovered at the turnover points, or to replace the defective items with quality goods;

--And fourthly, the supplier is obliged to compensate the customer for any losses which occur.

The fact that the moment of turnover of the goods should be considered as fulfillment of the supplier's obligations for delivery dates, as specified in the supply authorization, gives no cause for doubt among the practical foreign trade workers. Typically, the state arbitration authorities also hold to this opinion as they examine disputes between customers and suppliers<sup>4</sup>.

In spite of the fact that the moment of transfer of the goods, as defined in The Conditions, has great significance in supplier-customer relations, it would be proper in our opinion, to establish in The Conditions a basis for the delivery, as is stipulated in the General Conditions for Delivery of Goods Among CEMA Member Nations, and in other international documents which regulate delivery of goods.

The basis for delivery--describes special conditions which define the mutual obligations of the seller and the buyer according to a delivery agreement. Delivery basis conditions are not utilized in domestic deliveries; however, introducing them to The Conditions for Delivery of Goods for Export would in our opinion provide the possibility to precisely define the concept of delivery and more completely disclose its content, and in particular define the transfer of right of ownership, risk, and expenditures of the parties, and also the delivery date. Additionally, the basis for delivery could be established for various types of transportation for export goods.

The lack of a precise definition of the concept "delivery of goods" in the basic normative act which regulates the relationship of the customers and suppliers upon delivery of goods for export has a negative effect on the issuance and utilization of other normative documents for regulating these relations.

Let us dwell on just one such document. In December 1978 a decree of the USSR State Committee on Labor and Social Problems and the Secretariat of the AUCCTU gave approval to the Statute on Granting Premiums to Workers for High-Quality Manufacturing and Timely Shipment of Products for Export.

The very title of this document makes use of the conception of "shipment of goods for export", which is clearly in conflict with the main document, The Conditions for Delivery of Goods for Export.

In order to become clearly convinced in the unfortunate, in our opinion, use of the concept "shipment of goods for export", let us dwell in more detail on the characteristics of the separate points of the Statute on Granting Premiums. In Point 1 it is stated that, "Granting premiums is carried out for manufacture and timely shipment for export of high-quality products in accordance with the conditions stipulated in the supply authorizations of the all-union foreign trade associations (offices)"<sup>5</sup>..

As far as the funds for premiums are concerned, deductions are taken for them for high-quality production which is completely dispatched on time, as stipulated in the supply authorizations of the all-union foreign trade associations (offices) (Point 7).

The documents which confirm the actual shipment of goods for transport are duplicates of the railroad bills of lading, or bills of lading (for sea and river transfers) and other transportation documents (Point 8).

From the content of the points cited above one can be sure of the fact that free operation of the concept of shipment leads in practice to unnecessary disputes between suppliers and customers over the correctness of employing the Statute cited.

On the strength of the existing Statute on awarding premiums, the supplier, having shipped goods for transport, sends the customer a demand for payment and other documents, including a demand for paying premiums.

When there is basis for paying premiums the customer is obligated to do this<sup>6</sup> simultaneously with the calculations for goods delivered for export.

Here contradictions frequently arise in the relations between the customer and the supplier, which can be followed clearly in the following example: The supplier, having shipped goods from the plant within the deadline period as prescribed by the supply authorization, exercises the right to receive a premium, in accordance with the Statute on Granting Premiums. However, the goods actually arrive at the border station or the port after the deadline indicated in the supply authorization. In this situation, in accordance with The Conditions and established arbitration practice, it is considered that the supplier did not fulfill his obligations for the delivery deadline. In this connection he must not only not be granted a premium; on the contrary, penalty sanctions must be brought to bear against him for late delivery.

According to one of the supply authorizations, in 1983 the KamAZ [Kama Truck Plant] production association was to deliver for export a certain number of vehicles. Having shipped the vehicles at the end of May (within the period established by the supply authorization), the plant presented to the association a demand for payment of premiums. Meanwhile, the vehicles sent off by the plant had reached the border station but were transferred to the foreign railroad only by 3-5 June, which was three to five days after the established deadline. In this connection, the association denied the plant the premium.

Such examples are frequently encountered in customer-supplier relations. In order to eliminate such contradictions, unanimity of legal conceptions is required, in order that their use might not give rise to various interpretations.

In this connection it would be expedient, in our opinion, to put the normative acts right and bring them up to date, and first of all those issued by various departments on one and the same question. If the enterprises and organizations would utilize the normative acts in a uniform manner this would assist in eliminating the rise of conflicts and contradictions in practice.

#### FOOTNOTES

1. Henceforth--The Conditions.
2. See: Slovar' russkogo yazyka Akademii Nauk SSSR [USSR Academy of Sciences Dictionary of the Russian Language], Moscow, 1957-1961: the word "postavka" [delivery] in Volume 3 and the word "otgruzka" [shipment] in Volume 2.
3. See: Point 35, Statute on Delivery of Products of Industrial-Technical Significance and Point 31 of the Statute on Delivery of Consumer Goods.
4. See: Doronina, N.G., Nekotorye voprosy otvetsvennosti za prosrochku postavki i nedopostavku tovarov dlya eksporta. Kommentariy arbitrazhnoj praktiki [Certain Questions of Responsibility for Delayed Delivery and Incomplete Delivery of Goods for Export: Commentary on Arbitration Practices], Edition 14, Moscow, "Yuridicheskaya literatura" [Juridical Literature], 1981, pp 28-29.
5. Here and further on we shall examine one characteristic--the basis for awarding premiums.
6. The customer has the right to partially refuse to accept the demand for payment, if the bill includes the amounts of the premiums, computed in violation of the established procedure for establishing and using the fund for granting premiums to suppliers for high-quality manufacture and timely delivery of goods for export (See: The Conditions for Delivery of Goods for Export).

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## USSR-CEMA TRADE

### TRADE, ECONOMIC DEVELOPMENT FIGURES FROM 37TH CEMA SESSION

Moscow INTERNATIONAL AFFAIRS in English No 2, Feb 84 (signed to press 6 Feb 84) pp 8-15

[Article by D. Lebin]

[Text]

The 37th Session of the Council for Mutual Economic Assistance, held last October in Berlin, marked a new major step on the path of deepening cooperation among the socialist countries. The Session reviewed the results of CMEA's activities in the preceding period, assessed the situation in the national economies of the socialist community and set tasks for the future. The participants in the Session paid special attention to speeding up scientific and technological progress, rational utilization of fuel, energy and raw material resources and promotion of cooperation in the agro-industrial complex with a view to increasing food supplies for the CMEA countries' populations.

Having reviewed the outcome of the 37th CMEA Session and approved the work done by the Soviet delegation, the Political Bureau of the CPSU Central Committee gave a high assessment to the Statement adopted by the heads of the governments of the CMEA countries which has reaffirmed the immutability of the fraternal socialist countries' line of preventing a greater escalation of the arms race, preserving peace and promoting co-operation among nations.

The Political Bureau stressed the importance of the work done during the Session to complete the preparations for the economic summit meeting of the CMEA and expressed confidence that "the forthcoming meeting would effectively serve the cause of the economic development of the fraternal countries, the deepening of socialist economic integration and the building up of the socialist countries' unity and cohesion".

The economic and social development of the CMEA countries in the early 1980s has been proceeding in difficult conditions. Nevertheless, it was pointed out at the CMEA Session, the fraternal countries have taken a new step forward on the path of socialist construction, reaching the targets of the current Five-Year Plan and pursuing the strategic course of their Communist and Workers' Parties towards a continued rise in the well-being and cultural level of the working people. Using the fundamental advantages of socialism, the CMEA countries have done a good job to accelerate scientific and technological progress, deepen the international socialist division of labour and, on that basis, to switch their economies onto the path of predominantly intensive development.

Parallel with traditional commodity exchange, the CMEA countries have advanced their production, financial, scientific and technical cooperation, particularly in such forms as international specialization and co-operation of production, joint solution of the fuel-and-energy problem and coordinated development of individual branches of material production. There is practically no major industry, be it atomic power engineering or electronics, mechanical engineering or the chemical industry, where mutual economic or scientific and technical cooperation of the fraternal countries does not play an immense role. The CMEA countries work jointly on projects which are rather rare in world practice. Among these are the construction of main pipelines and power transmission lines, atomic power stations, and ore-dressing plants.

Without integration, stressed Yuri Andropov at the June 1983 Plenary Meeting of the CPSU Central Committee, "it is impossible to imagine the life of the countries of the socialist community... In future, integration will continue to deepen and become more and more all-embracing and effective reliably ensuring the strengthening of the national economies of the participating countries."

The profound meaning of these words is confirmed by the course of the economic and social development of the CMEA countries. It was largely due to integration that the economies of the CMEA countries have not only held out against the difficulties caused in the past few years by the drastic changes in the world market situation and the increased aggressiveness of the foreign policy of the imperialist states but continued to develop faster than the economies of the industrialized capitalist states.

In recent years, it has often been alleged in the West that the CMEA economies are crisis-ridden and the rates of economic growth have slowed down. The facts, however, irrefutably prove that over the 35 years of the socialist community's existence its member countries have been, and are, ahead of the West in the economic growth rates. In the 1970s the CMEA countries were developing twice as fast as the capitalist countries. The late 1970s saw the start of a new severe economic crisis in the West. Its effect was most agonizing in 1982, when the GDP of the industrialized capitalist states went down by 0.4 per cent and industrial output was almost 4 per cent down. The crisis hit the USA the hardest: its industrial output fell during the year by more than 8 per cent. The cut-back of production in the industrialized capitalist countries has brought in its wake, according to official statistics, an increase in the number of unemployed from 16.8 million in 1979 to 27.4 million in 1982. The West is an unchallenged leader only in the growth rate of military spending. During the past three years of the severe economic crisis the NATO countries have been boosting military spending, on the average, by 15.4 per cent annually. In 1982 the total military spending of the alliance ran as high as \$306.2 billion against \$195.5 billion in 1979.

Now what is the general result of the CMEA countries' development in recent years? In terms of quantity alone, the growth rates have slowed down somewhat. That was due primarily to the objective deterioration of conditions for economic development: fuel, energy, and raw materials grew more expensive, the expenditures on environmental protection increased, and there emerged the need to allocate a considerable portion of capital investment for building up the defence potential of the socialist community in response to the unrestrained arms race conducted by the imperialist countries and to their attempts to upset the established military-strategic balance. If it were not for the constant threat on the part of imperialism, the economic development rates of the socialist community countries would have been a good deal faster.

There are other causes of the slow-down in economic growth. Thus, some of the CMEA countries have failed to go over completely to predominantly intensive development and effectively to combine the achieve-

ments of scientific and technological progress with the advantages of socialism. The causes of this situation have been thoroughly analyzed at the congresses and plenary meetings of their Communist and Workers' Parties. Extensive work is under way in the CMEA countries to use the opportunities of raising the effectiveness of socialist production. The results of the first years of the current Five-Year Plan period have shown that the chosen path is correct.

In 1981-1982, the national income in the CMEA countries grew, on the whole, by 4 per cent (in Bulgaria 10 per cent, in the GDR 8 per cent, in Mongolia 16 per cent, and in the USSR 7 per cent). In 1983, according to preliminary data, there emerged a clear tendency towards increasing the economic growth rates in most CMEA countries.

As to the economic growth rates in the CMEA countries in the context of the sharply increased scope of production, in absolute terms 1 per cent of growth differs a good deal from what it used to be, say, 25 or 30 years ago. In the USSR, for instance, 1 per cent of national income growth, in material terms, exceeds 8 per cent of growth in 1950. In Bulgaria it is more than 10 per cent and in the GDR, 6 per cent.

The quality indicators are important, too. Thus, among the main conditions of intensive development is the high growth rate of labour productivity, which can be judged by the national income per one person employed in material production. In 1981-1982, this indicator increased in the CMEA countries, on the average, by 6 per cent (in Bulgaria 8 per cent, in Hungary 7 per cent, in Mongolia 10 per cent, and in the USSR 5 per cent). This made it possible completely or mainly to ensure a rise in the national income in Bulgaria, Czechoslovakia, the GDR, Hungary, Romania and the USSR.

Another important point here is that most of the CMEA countries have improved the proportion between the national income growth and the rise in the consumption of the primary sources of raw materials, fuel and energy required for the production. This and the progressive economic restructuring being carried out in the CMEA countries and the upgrading of their economic mechanisms provide preconditions for a stable economic growth of the socialist community. Thus, the facts fully confirm that the CMEA countries are the most dynamic, stable and progressive economic power in the world.

The results of the economic development of the socialist community between the last two CMEA sessions have shown that the growth of material production and its increased effectiveness have enabled the CMEA countries to achieve progress in more fully satisfying the growing material and cultural needs of the working people, a task which was set at the congresses of the Communist and Workers' Parties. As in the previous years, the incomes of the population, in cash and in kind, and payments and benefits from the social consumption funds continued to grow, and retail trade has increased considerably. In 1981-1982, 5.4 million flats and one-family homes were built for nearly 23 million people in the CMEA countries. A good deal was done to improve education, the public health service, and culture.

To hide the economic setbacks and simultaneously to smear the socialist system, the imperialist circles in the West launched a frenzied propaganda campaign against the socialist community. But their hopes to derive political benefits from this were dashed. Contrary to forecasts by Western experts, who predicted a collapse of the Polish economy, industrial output in Poland began to grow beginning with the latter half of 1982. Within nine months of the past year it went up by 8 per cent as compared with the 1982 level. Tangible results have been achieved in other economic sectors as well. Determined to expand economic, scientific and technical relations with the other CMEA countries, Poland firmly rebuffed the attempts of the world reaction to interfere in its internal affairs.

The Socialist Republic of Vietnam, the Republic of Cuba and Mongolian People's Republic have made headway in the construction of the material and technical base of socialism. With the aid of the USSR and the other fraternal countries, these three states continued to industrialize and progressively restructure their national economies, paying special attention to the development of those branches and types of production which enable them to be more active in the international socialist division of labour and economic integration.

It was noted at the Session that the CMEA countries were conducting extensive work to raise the effectiveness of using the fuel, energy and raw-material resources and to deepen cooperation in the joint search for ways of rational utilization of fuel, energy and raw and other materials. Estimates and experience have shown that this work is important in that the expenditures on ensuring a rational utilization of fuel, energy and raw materials produce, as a rule, a greater effect than allocations for increasing their production. Thus, the expenditures on saving these resources are, on the average, 50 to 67 per cent less than those required for an equivalent increase in the production and transportation of these resources to the consumer. Suffice it to say that the saving of 1 gramm of equivalent fuel per 1 kWh of power production at the thermal power plants and a 1-per-cent reduction of losses of electricity in the power networks in the CMEA countries as a whole would enable them to save by 1985 about 2 million tons of equivalent fuel.

At present, in most of the CMEA countries, following the decisions taken by the supreme Party and government bodies, comprehensive goal-oriented programmes and measures on rational utilization of fuel, energy and raw-material resources have been drawn up or are being developed. Work is under way to produce progressive technologies and machines and equipment ensuring wide utilization of secondary resources and also new and supplementary sources of energy, and the use of light-weight structures and substitutes for scarce materials.

To make more effective use of energy resources Bulgaria, for instance, will modernize and reconstruct equipment at energy-producing and energy-consuming enterprises to reduce losses during the transmission, conversion and distribution of electricity and to improve the rating system of fuel and energy consumption. To pursue a uniform nation-wide energy policy, an inter-departmental coordinating council for rational use of energy resources and energy has been set up with the participation of state and public organizations under the Bulgarian Ministry of Energy.

Considerable progress has been made in Hungary in introducing energy-saving technologies. Thus, the modernization of equipment at the Pécs nitric plant brought down the consumption of energy used for the production of ammonia almost by half. Many more such examples could be cited here. This is a general picture of the main energy-saving trends in Hungary: in the steel industry it is the improvement of the quality of iron-ore agglomerate and the introduction of oxygen blast technology; in agriculture it is modernization of farm-produce drying technology; in transport it is the use of monitoring instruments registering gasoline consumption, the fitting out of trucks with instruments ensuring a reduction of gasoline consumption, and improvement of the transportation pattern.

The GDR is effectively solving the problem of utilizing raw materials and energy more fully. For instance, the use of thick-sheet steel of increased strength for the manufacture of cranes and excavators reduces the specific quantity of metal per power unit. The production of steel for cold plastic working makes it possible to increase the use of steel by almost 95 per cent in machine building with a simultaneous growth of labour

productivity by 200 per cent. Millions of marks are saved when antirust steel grades are used.

One of the main directions in rational use of fuel, energy and raw materials is the substitution of one type by another, which often can be immensely effective. For example, the specific input of petrochemical raw materials on a comparable amount of construction materials is 67-80 per cent less in comparison with metal ores.

Expensive types of resources can be replaced by cheaper ones both in industry and in every-day use. In Hungary, gas heating will be introduced in more than 100,000 flats in the current five-year plan period to save oil. It is expected to save 80,000 tons of oil by 1985 due to this measure and the installation of more effective regulators of heat-consumption in another 150,000 flats. In Czechoslovakia, the use of non-traditional energy resources is expected to become a major means of increasing fuel resources. In agriculture, for instance, their share in total fuel consumption will amount to 10 per cent by 1990. In Romania, the use of liquified gas in buses will save gasoline. According to the Romanian press, every bus using liquified gas instead of gasoline will save 10 tons of gasoline annually.

The use of secondary sources and production wastes is of great help in providing the CMEA economies with a sufficient amount of fuel, energy and raw materials. Practically all the CMEA countries have accumulated positive experience in this area.

For instance, to implement the programme of utilizing waste materials and secondary raw materials adopted in 1981, Hungary has built 33 projects requiring small and fastly repaid capital investments. As a result, utilization of waste and secondary raw materials was increased from 6.3 billion forints in 1980 to 7.3 billion forints in 1982. In 1983 the figure is expected to reach 8.4 billion forints.

A good deal of experience in utilizing secondary energy has been accumulated in the GDR. Blast-furnace gas, brown coal briquet fines and briquet breakages, waste heat from open-hearth furnaces, and the like, have long been put to good use in that country. The economic effect of using these resources is evidenced, for instance, by the fact that thousands of flats, public facilities and some 20 factories of Brandenburg are heated by the steam and waste heat from the open-hearth furnaces of the national enterprise Stahl und Walzwerke, which made it possible, first, to save the money required to extract and transport 60,000 tons of brown coal and, second, not to have to build a separate power-and-heating plant.

It is interesting to note that about 43 per cent of the raw-material requirements of the board-and-paper industry in the GDR are met from utilization of waste paper, 60 per cent of the requirements of the food industry in glass containers are met by returnable bottles and jars, and 70 to 75 per cent of the raw-material needs of ferrous metallurgy are met due to the use of scrap metal.

The facts thus show that large-scale measures are being effected in the CMEA countries to save fuel and energy and the good results have been achieved. Addressing the CMEA Session, Nikolai Tikhonov, Chairman of the USSR Council of Ministers, said: "We are greatly satisfied to note also the successes achieved by the fraternal countries, by the socialist community as a whole, in accomplishing the tasks set at the congresses of our Parties. At the same time a lot has to be done to use more fully the available potential, and to complete successfully the fulfilment of the five-year plan. To this end we must increasingly rely on our reciprocal cooperation."<sup>1</sup>

The Session also noted the need to speed up the implementation of the agreements signed earlier on measures to produce machines and equipment through the wide use of industrial robots, microprocessor technology and microelectronics. It indicated that urgent steps have to be taken to improve the quality of goods supplied on the reciprocal basis and that is necessary to put an end to the practice of delivering outdated goods.

There should be a fuller use of the reserves of cooperation on the level of enterprises, and further improvements should be made in the economic planning mechanism of cooperation geared to a greater extent to the solution of common problems facing the community, such as retooling of production, rational use of resources and introduction of new machines and materials. The principle of mutual benefit and the maintenance of balanced trade and payment relations should be observed more consistently in negotiating terms of mutual deliveries.

Attaching great significance to cooperation within the CMEA framework in raising the effectiveness of using fuel, energy and raw and other materials, the Session considered and approved the basic guidelines for expanding cooperation among the CMEA countries on the rational utilization of fuel, energy and raw-material resources, including secondary resources. The decisions adopted at the Session provide for the promotion of the countries' interaction in this important area, primarily by expanding cooperation in the manufacture of energy- and resources-saving equipment, improving the planning of saving material resources, developing and introducing better norms of expenditures, expanding the production of semiconductor equipment used for energy conservation, ensuring rational use of scarce types of fuel, and extending the exchange of know-how and exchange of services.

The 37th CMEA Session also approved the comprehensive measures on cooperation to improve food supply for the populations of the CMEA countries, which is supplement to the Long-Term Goal-Oriented Programme of Cooperation in Agriculture and Food Industry.

The CMEA countries attach primary significance to the problem of increasing the output, and a more rational use, of foodstuffs and boosting their mutual deliveries. At present, active search is under way, on national and international levels, for the most reliable, stable and mutually beneficial forms and methods of incentive in this area. The current prices in reciprocal trade and the possibilities for raising the effectiveness of their impact on production processes and mutual deliveries of farm produce in future are being studied, as are the possibilities for creating material and financial resources, in particular, with the use of credits granted by the International Investment Bank, specialized crediting funds, etc.

This problem, difficult as it is, will be solved, no doubt, through the joint efforts of scientists and experts, and all those employed in the agro-industrial complex of the CMEA countries. This target is indicated also in the decisions taken by the CMEA Session, providing for the further cooperation of the fraternal countries in the efforts to improve the technology of the output of agricultural produce and foodstuffs; the solution of the problem of incentives and an increased volume of mutual deliveries of foodstuffs; and combined efforts to provide farming and the food industry with the necessary machines and equipment.

The steady progress of the CMEA economies and their increasing effectiveness, as has been noted, are largely due to the fact that the fraternal countries are active participants in the international socialist division of labour and in socialist economic integration. This is evidenced by the expansion of foreign trade, whose volume in the first two years under the five-year plan increased by 16.8 per cent and amounted to almost 267 billion rubles (in current prices). In this period, trade within the CMEA grew most rapidly: its turnover in 1982 reached nearly 149 billion rubles—24 per cent more than in 1980.

It was noted at the Session that the further deepening of socialist economic integration is associated in many ways with the extension of rights and increased interest of economic organizations in promoting direct co-operation ties with CMEA partners and with the observance of the principle of mutual benefit and balanced trade and payment relations.

The work of the 37th CMEA Session proceeded in a difficult international situation marked by stepped up tensions and antisocialist hysteria. The actions by the imperialist circles, obviously seeking to upset the existing military-strategic parity between the USSR and the USA, between the Warsaw Treaty and NATO, a fact which has been recognized internationally, are aimed at interference in the domestic affairs of sovereign socialist states, disrupting mutually beneficial trade, economic, scientific and technical relations, erecting barriers in the way of cooperation with them, and organizing a trade, crediting and economic blockade. This is seen from the outcome of the meeting of the heads of the leading capitalist states last summer in Williamsburg. An analysis of it will show that the discrimination policy with regard to the socialist countries in the area of trade and economy is neither a transient episode nor a tactical ploy, but a long-term strategy of the Western countries.

The Communiqué of the 37th CMEA Session stressed that the heads of the CMEA countries' delegations resolutely rejected the course of imperialist circles towards a continued aggravation of world tensions, towards eroding international political and economic ties. They reaffirmed the determination of their countries to sustain the efforts to improve the international climate.

In these conditions it is imperative today more than ever before to tap the national resources of the CMEA countries, more fully, to promote cooperation among them, and to build up economic and military-political unity of the Council in accordance with the decisions adopted at the Prague meeting of the Political Consultative Committee of the Warsaw Treaty Countries and the Moscow meeting of the Party and government leaders of Bulgaria, Czechoslovakia, the GDR, Hungary, Poland, Romania and the USSR. This policy, naturally, will not turn the CMEA into an isolated autarchic grouping, as it is alleged in the West. On the contrary, the participants in the 37th Session reaffirmed their readiness to develop mutually beneficial trade and economic relations with all countries that are prepared to cooperate on an equitable and mutually beneficial basis, regardless of their economic level and socio-economic system.

The participants in the Session welcomed the successful completion of the Madrid meeting of the member states of the Conference on Security and Cooperation in Europe and voiced their firm conviction that its decisions would serve as a sound foundation for the development of mutually beneficial cooperation among the participating states in most diverse fields and for combining their efforts to safeguard European and world peace.

The CMEA Session was attended by representatives of a number of the countries actively cooperating with the CMEA: the Socialist Federal Republic of Yugoslavia, the People's Republic of Angola, the Democratic Republic of Afghanistan, the People's Democratic Republic of Yemen, the Lao People's Democratic Republic, the People's Republic of Mozambique, and Socialist Ethiopia.

Following the endorsement of an agreement on cooperation between the CMEA and the Republic of Nicaragua, which envisages the establishment and promotion of many-sided economic, scientific and technical relations between the CMEA countries and Nicaragua, a delegation of the Republic of Nicaragua attended the Session.

The participation of these countries in the work of the supreme CMEA forum, which has become a tradition, testifies to the growing prestige and influence of this organization and also to the attractive force of the socialist principles of cooperation underlying the economic relations between the CMEA countries and the developing states. In the situation of grave economic upheavals that have hit the world capitalist system, this cooperation is becoming ever more significant for decreasing the economic dependence of the developing states on the imperialist powers which are trying to shift the burden of the economic crisis on their shoulders, to intensify neocolonialist exploitation and have private capital, transnational monopolies above all, penetrate their economies.

The 37th CMEA Session noted the further growth of equitable and mutually beneficial cooperation between the CMEA and the developing countries. The CMEA countries back the progressive demands advanced by the developing states for restructuring international economic relations on a just and democratic basis and for establishing a new international economic order. The Session reaffirmed the community of the main interests of the CMEA and the developing states in this area, which created an objective foundation for the continued strengthening of their cooperation in the struggle against imperialism, colonialism and neocolonialism.

The participants in the CMEA Session stressed the great significance of interdependence between disarmament and development and expressed satisfaction at the fact that their position on this issue coincided with that of the non-aligned movement. The CMEA countries consider that the funds saved as a result of effecting concrete measures to stop the arms race and achieve disarmament could be used to solve economic and social problems facing the developing states. The Session also supported the idea of the earliest possible opening within the UN framework of global talks on the most urgent world economic problems in accordance with the decisions of the UN General Assembly.

The communique of the 37th Session stressed that the CMEA countries, together with the non-aligned states, strongly denounced economic aggression in any form and the attempts to resort to political pressure and interference in the internal affairs of states.

Outlining ways to further promote cooperation among the fraternal countries, the participants in the 37th Session noted with satisfaction that the increasing economic, scientific and technological potential of the socialist community and the growing maturity of the socialist relations of production in these countries were exerting a decisive influence on both the strengthening of world socialism and the entire course of historical development. The Soviet Union and all the socialist countries have placed their political prestige and economic might at the service of peace and social progress.

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USSR-CEMA TRADE

YEAR-END REVIEW OF 37TH CEMA SESSION IN BERLIN

Moscow POLITICHESKOYE SAMOOBRAZOVANIYE in Russian No 1, Jan 84 (signed to press 28 Dec 83) pp 135-138

[Article under rubric "Criticism and Bibliography": "The Economic Cooperation of the CEMA Member Countries"]

[Text] The member countries of the Council for Mutual Economic Assistance, during the time that has passed since the 36th CEMA Session, under the leadership of the communist and workers parties and developing complete cooperation, directed their efforts toward the further buildup of their economic and scientific-technical potential, the improvement of the economic structure, the mobilization of reserves, and the taking of all steps to economize all types of material resources.

The results and prospects of the economic and scientific-technical cooperation among the fraternal countries were discussed at the 37th CEMA Session, which was held from 18 through 20 October 1983 in Berlin. The materials pertaining to that session were published in the December 1983 issue, No 12, of the magazine EKONOMICHESKOYE SOTRUDNICHESTVO STRAN-CHLENOV SEV. We are acquainting our readers with some of those materials in the article that follows.

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In the report presented by the Executive Committee concerning the activities of the CEMA between the 36th and 37th CEMA Sessions, which was given by Chairman of the CEMA Executive Committee, Deputy Chairman of the East German Council of Ministers, Comrade G. Weiss, it was noted, in particular, that there has been a continuation of the development and implementation of the multilateral and bilateral agreements dealing with measures for long-range target programs for cooperation (DTsPS). As of 1 July 1983 the CEMA member countries have signed 198 multilateral agreements dealing with economic and scientific-technical cooperation.

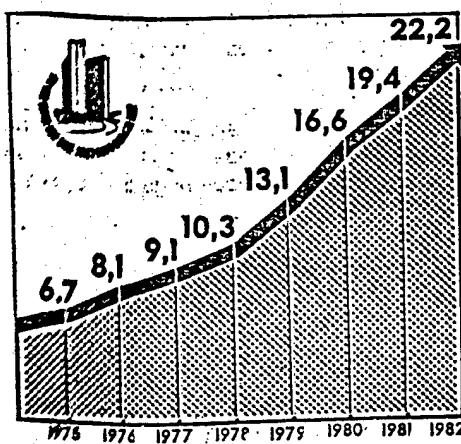
The countries have begun to introduce the target programs for the development of the priority problems of cooperation in combination with multilateral agreements, including those in the area of a single base for electronic elements, microprocessing technology, and robot technology.

Within the confines of the cooperation with regard to the use of nuclear energy for peaceful purposes, the participating countries have begun the construction and are carrying out the preparatory operations for installing AES [nuclear power stations] with VVER-1000 type reactors in Bulgaria, East Germany, Romania, and Czechoslovakia. Construction is continuing at the first nuclear power stations with VVER-440 type reactors in Cuba and Poland. Lead stations for nuclear heat-supply are in the construction stage in the USSR.

Bulgaria and East Germany have activated sets of technological units for deepening the refining of petroleum, and Hungary, Romania, and the USSR are carrying out the construction of these sets.

Multilateral agreements and protocols have been signed and there has been an extension of the deadlines for the existing agreements dealing with the specialization and cooperative action in the production of individual types of synthetic rubber and chemical fibers, chemical and biochemical additives to feeds and fodders, the output of the woodpulp and paper industry, as well as measuring pinion pumps, spinnerets, and thread-carrying parts that are necessary for the production of chemical fibers.

Increase in the Installed Capacity at Nuclear Power Stations in the CEMA Member Countries (millions of kilowatts).



In the food industry, as a result of the exchange of advanced experience, the fraternal countries have assimilated the production of more than 100 new types of food products, and have tested and are introducing into practice more than 50 progressive packaging materials. In conformity with the general agreement in the area of fresh-water fishing, the exchange of fish-breeding stock has been begun. Three treaties have been concluded which deal with cooperation in improving the technological processes and technology of the dairy industry, the production of confectionery articles, and spices.

In the field of agriculture there has been an expansion of the cooperation among the CEMA member countries with regard to selection, seed growing, and

international variety testing. In 1982, 316 varieties and hybrids were tested, of which 36 were accepted in the countries for regionalization.

The report points out that during the report period the CEMA member countries and the Council agencies continued on a bilateral and multilateral basis to render assistance to Vietnam, Cuba, and Mongolia, which assistance was aimed at the acceleration of development and the increase in the effectiveness of the economy of those countries with a consideration of their specific conditions.

The Executive Committee considered the question of the intensification of the coordination of the activities of the countries in the socialist community in the development of the transportation complex of Vietnam and approved the corresponding measures in that field.

For purposes of implementing the General Agreement concerning the construction of new capacities for the production of nickel and cobalt-bearing output on the basis of the Las Camariocas deposit (Cuba), bilateral agreements were signed between Cuba and Bulgaria, Hungary, East Germany, Romania, the USSR, and Czechoslovakia. The participating countries, in conformity with the approved schedule, have begun to build the plant.

A considerable amount of assistance was rendered by the CEMA member countries to the Mongolian People Republic in carrying out geological prospecting operations. For example, the International Geological Expedition in the North Kerulen Region completed the preliminary prospecting of the major Undur-Tsagan tungsten and molybdenum deposit.

A report on the expansion of the cooperation among the CEMA member countries in the economical and efficient use of the fuel-and-energy and raw-material resources, including secondary ones, with a consideration of the experience in that field, was given by the chairman of the CEMA Committee on Cooperation in the Field of Material-Technical Supply, Deputy Chairman of the USSR Council of Ministers, chairman of USSR Gosnab, Comrade N. V. Martynov. He remarked that in this sphere of cooperation, the following measures were carried out during the report period.

Reports were prepared on the experience of the CEMA member countries in economizing and increasing the efficiency in the use of fuel and energy and in raising the level of use of secondary energy resources in the industry of the CEMA member countries.

Methodological documentation has been developed and transmitted to the interested member countries and to the Council agencies for preparing the appropriate materials for implementing the measures of the DTsPS subprogram in the field of energy, fuel, and raw materials -- "Cooperation in the Economical and Efficient Use of Fuel and Energy," and the work program for the chemical industry and ferrous and nonferrous metallurgy for purposes of expanding the use of electrical energy as a replacement for high-grade types of organic fuel.

A scientific-technical forecast is being developed to resolve the fuel and energy problems of the CEMA member countries for the period until 2000 and for the more distant future.

Specific measures have been developed for the further improvement of multi-lateral economic and scientific-technical cooperation with regard to problems of the efficient and economical use of material resources, and the work of the CEMA agencies in this area is being coordinated.

Cooperation is being continued for the purpose of studying the processes of preparing and combustion of low-calorie fuels and proposals and technical requirements for the creation of highly effective furnace devices and equipment have been developed.

Joint operations are under way to reduce the energy-intensity of the production of coal by means of the reduction of the fuel and energy expenditure norms per unit of output, the substantial renovation, and the development of new technology and technological processes of production and processing of coal. Projects are under way to create an effective technological scheme for the obtaining of synthetic liquid products from coal, the assimilation of industrial technological methods and equipment for the gasification of coal, the use of coal and coal-bearing materials, slags, and other by-products for the obtaining of chemical raw materials and for expanding the scale of the application of the waste products of the extraction and enrichment of coal in various branches of industry.

A general agreement is being implemented for cooperation for purposes of the considerable increase in the depth of petroleum refining by means of the introduction of improved technological methods on the basis of specialization and cooperative action of the production of units and equipment for the secondary processes of petroleum refining, as well as a general agreement and a bilateral agreement governing specialization and cooperative action in the field of the production of energy-intensive chemical output (in the USSR) and the production of less energy-intensive chemical output (in other CEMA member countries).

A joint project has been conducted to reduce the consumption of coking coal and to reduce the expenditure of coke during the smelting of cast iron.

Questions of the more complete use of secondary energy resources are being resolved.

In the field of nonferrous metallurgy, a program of cooperation is being implemented to achieve the increased efficiency of energy consumption in the branch in 1981-1985, which program encompasses both the questions of reducing the specific expenditure of fuel and energy in the most energy-intensive processes of production of nonferrous metals, and the use of secondary heat.

A number of measures have been defined for cooperation that is aimed at the efficient use of energy resources in construction.

A decisive condition for the effective carrying out of the national programs in the area of the increased efficiency in the consumption of energy, fuel, and raw and other materials in the fraternal countries is their material-technical support, primarily, with the appropriate machinery, equipment, and design materials.

In this regard, N. V. Martynov emphasized, it is fundamentally important to achieve the purposeful deepening of specialization and cooperative action among the CEMA member countries in the production of equipment that guarantees the broad introduction of energy-saving and material-saving technological schemes, the reduction of losses of fuel, energy, and raw and other materials, the more complete and comprehensive use of secondary, new, and additional resources, as well as the comparatively more accessible types of energy as replacements for scarce carriers of energy, primarily liquid hydrocarbons. This approach is receiving greater and greater reflection in the activities of the CEMA committee and branch standing commissions.

A report on the comprehensive measures in the cooperation to improve the rate with which the population of the CEMA member countries are supplied with foodstuffs was given by Chairman of the CEMA Committee on Cooperation in the Field of Planning Activity, Deputy Chairman of the USSR Council of Ministers, Chairman of USSR Gosplan, Comrade N. K. Baybakov. He remarked that, proceeding from the importance of international cooperation in the development of the branches in the food complex, the CEMA member countries have developed a draft version of Comprehensive Measures for Cooperation to Improve the Supplying of the Population in the CEMA Member Countries with Foodstuffs. The purpose of these measures is assuring, within the shortest possible periods of time and by using the countries' increased economic potential, a substantial improvement in the structure of the public's nutrition by the consumption of products that are biologically most valuable.

It is planned to carry out these coordinated measures through a system of treaties and agreements which will be a supplement to the Long-Range Target Program for Cooperation in the Field of Agriculture and the Food Industry, which was adopted by the Council Session in 1978.

For purposes of increasing the production of the most important types of agricultural and food output, it is planned to continue and to expand the cooperation in the development of genetics, selection, and seed growing, and in the introduction of industrial technological schemes for the growing of agricultural crops.

The increase in the gross harvests of grain must be achieved primarily by increasing the harvest yield of grain and grain-legume crops, and also the reduction of losses at all stages of their production, storage, and processing.

For the more complete providing of animal husbandry with feeds and fodders, the Comprehensive Measures stipulate cooperation in increasing the production of coarse, succulent, and concentrated fodders, in improving the quality, and reducing their losses, and also in the production of vitamins and other additives to feeds and fodders.

It is also planned to expand and deepen the specialization and reciprocal use of breed stocks of agricultural animals for the development of breeds that are most suitable for industrial-type production; the development and improvement of industrial technological schemes and technical means of maintaining animals and poultry.

The Comprehensive Measures contain recommendations for improving the technology and technological methods of processing the output of animal husbandry and the organizing of waste-free production.

Growth of Consumption of Basic Types of Food Products Per Capita of Population of the European Member Countries of CEMA  
(1982 in percentage of 1960)

Country	Meat, including meat articles	Milk and milk products	Eggs	Vegetables (in terms of fresh)	Sugar and articles from it
Bulgaria	223	198	261	120	201
Hungary	160	151 <sup>1</sup>	197	...	144
East Germany	165	...	153	158	150
Poland <sup>1</sup>	153	113	159	106	120
Romania <sup>2</sup>	227	154	235	199	160
USSR	142	122	211	144	157
Czechoslovakia <sup>1</sup>	152	136	179	109	102

1.. 1981 in percentage of 1960.

2. 1981 in percentage of 1965

In order to guarantee the increase in the commodity fund for the consumption of fish and fish products, the CEMA member countries plan to carry out jointly a number of measures that promote the acceleration of the development of industrial fresh-water fish growing. On the basis of the existing general agreement governing cooperation in the development of fresh-water industrial fish growing, there will be an expansion of the cooperation in organizing the production of the appropriate machinery, equipment, and devices, as well as feeds and means to prevent and treat fish diseases.

There will be further development of the cooperation in expanding the production and reciprocal deliveries of vegetables, fruits, and grapes in fresh and processed form, and in the obtaining of sterile planting materials for apple trees, strawberries, peach and apricot trees, and potatoes. An important reserve for increasing the commodity funds for consumption of vegetables, fruits, and grapes will be the reduction of the losses at all stages of production, transporting, and processing.

A large amount of importance is attached to developing the cooperation that is linked with the material-technical support of agriculture and the food industry, particularly with the satisfying of the needs of the branch for modern means of mechanization, chemical means of protecting plants, mineral fertilizers, and preservatives and other additives to feeds and fodders. A serious amount of attention will be devoted also to the development of the warehouse and refrigeration managements and to the resolution of the problems of packing and packaging for foodstuffs.

There will be a continuation of the work in accordance with agreements governing the specialization and cooperative action in the production of systems of

machinery and equipment for the complete mechanization of agriculture, and instruments and equipment for testing, repairing, and technical servicing of agricultural machinery, and in the production of machinery for the transporting, storage, and application to the soil of mineral fertilizers and poisonous chemicals.

It is planned to carry out a series of measures involving the technical re-equipping of the branches of the food industry, including the development and introduction of waste-free production entities and the expansion of the agreements governing specialization and cooperative action in the production of equipment.

It will be necessary to develop and introduce new methods and technological schemes for production, and various operations and individual types of operations in vegetable and animal husbandry, technical plans, new varieties of grain, industrial, vegetable, and other crops, modern instruments, and agrotechnical requirements for new models of machinery, and to expand the application of microprocessing technology.

The implementation of the Comprehensive Measures, N. K. Baybakov emphasized, will exert an effective influence upon providing the CEMA member countries with foodstuffs, and upon increasing the effectiveness of their national and raising the national standard of living.

Direct Expenditures of Labor the Production of One Quintal of Output in Agriculture (man-hours; average for the year)

	1971- 1975	1976- 1980	1981- 1982
<b>On kolkhozes:</b>			
sugar beets (factory)	1.6	1.3	1.2
potatoes	3.4	3.0	3.0
weight increase in young animals and			
weight increase from fattening of cattle	61	53	55
<b>On sovkhozes:</b>			
sugar beets (factory)	2.0	1.6	1.6
potatoes	3.4	3.1	3.2
weight increase in young animals and			
weight increase from fattening of cattle	46	41	42

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## USSR-CEMA TRADE

### GAINS FROM CEMA COOPERATION LISTED

Vilnius KOMMUNIST in Russian No 1, Jan 84 (signed to press 14 Jan 94) p 104

[Unattributed article under the rubric 'Figures and Facts': "Scientific-Technical Cooperation of the USSR with Socialist Countries"]

[Text] The economic gain obtained just in 1981 and 1982 from introducing into the national economy of the USSR the results of studies completed on the topic of scientific-technical cooperation with CEMA countries has been estimated, according to data of USSR ministries and departments, at approximately 500 million rubles. Considerable success has been attained in the course of the Soviet Union's bilateral cooperation with fraternal socialist countries.

BULGARIA. As a result of a joint solution to the problem of organizing the production of monolithic and diffuse structures in super-high-frequency devices, technology has been introduced with an economic gain to our country of 900,000 rubles, and of 520,000 leva to Bulgaria.

HUNGARY. One of the significant results of Soviet-Hungarian cooperation is the achievement in the area of developing automated systems based on small computers for the collection, transmission and storage of data from scientific research and production testing. A real-time, navigational-geo-physical computer system has been jointly developed for carrying out geo-physical operations. The economic gain just to the USSR Ministry of Geology is 950,000 rubles per year. As a result of cooperation in agriculture and in the food industry, an inter-line corn hybrid has been produced, which has yielded a harvest in Soviet fields of 83.5 centners of grain per hectare.

GDR. In cooperation with GDR scientists and specialists, the technology has been developed for smelting high-quality steel alloys in a 30-ton plasma furnace. At the Chelyabinsk Metallurgical Plant one plasma-arc furnace with a capacity of 12 tons has already been introduced. Smelting of high-speed steel with a nitrogen alloy has been introduced.

Production was begun in 1982, with the cooperation of the GDR, of a quasi-electronic nuclear heating and power station (ATS). The economic gain for the five-year plan will be 10 million rubles. Since 1981, a lead-crystal

founding installation has been introduced at the Gusev Crystal Plant. Ten installations are expected to be introduced during the five-year plan. The annual economic gain from one installation is 136,000 rubles.

CUBA. One of the trends of Soviet-Cuban scientific-technical cooperation is improvement of the technical-economic indicators for producing raw sugar and refining it in sugar refineries of the USSR and Cuba. Work done jointly on improving the technology of obtaining refined sugar from raw cane sugar has yielded a high economic gain--200,000 rubles per year from a single sugar refinery. This technological procedure has been introduced at 10 beet-sugar refineries in the USSR. Introduction of it is planned at another eight refineries.

ROMANIA. Joint efforts have been completed on improving the quality of converter carbon and alloyed steels. The results have been applied at the Novolipetsk Metallurgical plant. The annual economic gain is 200,000 rubles.

In 1982 the USSR adopted a research method for ferro-concrete structures in natural conditions, which has increased the anti-corrosion resistance of the structures to aggressive agents by a factor of 1.5-2.

In Belorussia, at the Minsk Progress Association, technology has been introduced to produce fashion-twisted yarn at the Astrakhan Knitting Combine, to develop an assortment of knit fabrics from new types of yarns, with an economic gain of 380,000 rubles.

CZECHOSLOVAKIA. In 1982, as the result of cooperation with the CSSR at the Azov Plant for Automatic Forge and Pressing Machinery, development was completed and serial production started of highly productive automatic machines to produce nuts. This operation will help to increase labor productivity by a factor of 1.3-1.9.

For the needs of machine-tool manufacturing and metallurgy, industrial robots have been jointly developed to serve integrated, lathe, milling and other types of machine tools, sheet-stamping processes, removal of castings from machines and pressure-die casting.

Serial production has started of jointly developed multi-pole, horizontal electro-filters for purging industrial gases at temperatures up to 330 degrees C. The economic gain from reducing the production cost of new electro-filters in 1982 was 2.3 million rubles.

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USSR-CEMA TRADE

COOPERATION IN METALWORKING TECHNOLOGY, MICROPROCESSORS DETAILED

Moscow EKONOMICHESKOYE SOTRUDNICHESTVO STRAN-CHLENOV SEV in Russian No 12, Dec 83 (signed to press 20 Dec 83) pp 29-31

[Article by Nacho Papazov, chairman of the State Committee for Science and Technological Progress of the People's Republic of Bulgaria: "An Important Factor in the Intensification of the Economy"]

[Text] The communist and worker's party of the CEMA nations are consistently and undeviatingly pursuing a course of intensification of public production based on increased labor productivity, accelerated scientific and technological progress, improvement of the economy and intensification of the integration processes. The successes achieved by the CEMA nations in 1982 with respect to the fulfillment social and economic programs and the build-up of the socialist commonwealth's economic strength are especially apparent against the backdrop of the growing crisis in the capitalist world. The fraternal nations' industrial output grew by 2.3 percent from the 1981 level. This was achieved mainly with an increase in labor productivity, which amounted to 2.1 percent in 1982. The national income as a whole grew by 2.6 percent for the year 1982, and 4 percent for the first 2 years of the 5-year period.

While accounting for only 9.8 percent of the planet's population, the CEMA nations provide 21 percent of the world's output of electric energy, 32.5 percent of the steel, 35 percent of the industrial output and so forth. These successes were made possible by the fraternal cooperation among the CEMA nations.

Since adopting the Comprehensive Program the CEMA nations have significantly increased the scale of their scientific and technological ties and have performed an enormous amount of work to unite the scientific capability and enhance the effectiveness of scientific research.

Socialist economic integration in this area constitutes an unlimited source of acceleration of scientific and technological progress. It is contributing to the improvement of production effectiveness and quality, the development of important new sectors of the national economy, enlargement of the output of modern products, raw and processed materials, the adoption of highly efficient technologies and the application of mechanization, automation, robotization, chemical processes and electronics in production.

As they have fulfilled the Comprehensive Program, scientists of the CEMA nations have carried out 16,000 joint fundamental and applied studies. Approximately 2,000 designs for new machines, mechanisms and assemblies and 1500 new types of materials have been developed, around 1400 technological processes have been improved, and so forth.

Something on the order of 450 scientific studies were performed during the past 5-year period under the Coordinated Plan of Multilateral Integration Measures. Approximately 150 different plants, machines and items of equipment, more than 30 new technologies, around 20 materials and preparations and a large number of sets of methods, recommendations and other organizational normative documents were developed.

A total of 297 multilateral agreements and contracts for the joint resolution of important scientific and technological problems with division of labor are in effect among the CEMA nations today. A total of 64 coordinating centers, 5 economic and scientific and technological organizations, 10 scientific teams, a scientific production association and 4 management associations have been created at the international level.

Let us mention just a few of the priority areas in which the scientists of the fraternal nations are collaborating. Fuel and energy are one of the main areas. The main condition for the development of power engineering today is to have the necessary capacities and make skillful and efficient use of them. We know that rates of growth of power engineering determine the dynamics for the development of a nation's entire economy. The CEMA nations have therefore joined efforts to find new and effective methods for converting solar, wind and geo-thermal energy into electric, fuel and chemical power; to develop large-capacity nuclear reactors using fast neutrons and water-cooled reactors with a capacity of 1000 megawatts; to perfect the technologies and the equipment for energy-production processes; to expand use of secondary energy resources; to reduce outlays of active and reactive capacity in the transfer of energy, and so forth.

Metal is the foundation of modern industry. The CEMA nations have an adequate metallurgical industry. An enormous quantity of metal is required for the accelerated development of machine building, construction and transportation, however. Specialists of the fraternal nations are therefore engaged in a search for ways to improve metallurgical production and develop fundamentally new technological processes. Powder metallurgy is a classic example of promising solutions. At the present time the production of iron and alloyed powders by atomizing liquid metal is being mastered, new grinding and component materials are being adopted for the manufacture of tools, new alloys with a base of borides of rare-earth metals are being developed for the electronics industry, and so forth.

It is an important task of scientific and technological cooperation to develop corrosion inhibiting coatings for metals to be used in machine building, particularly inhibitors for equipment for the oil, gas and petroleum processing industry, highly productive automatic machines for applying galvanic coatings, and so forth.

Programs have been prepared for two strategic areas of work--robot engineering and microprocessors. They were prepared in the past 2 years at the initiative of the CEMA Committee for Scientific and Technological Cooperation. The General Agreement on Cooperation in the Development and the Extensive Employment of Microcompressors in the National Economies of the CEMA Nations was signed at the 36th meeting of the CEMA Session. The Agreement on the Development and the Organization of Specialized and Cooperative Production of Industrial Robots was also signed. These documents called for the creation of conditions conducive to the accelerated development of robot and microcompressor engineering with a unified principle and a unified foundation in the fraternal nations. The Council of Chief Designers for Robot Engineering has developed a unified technical concept, a general priority list and general technical specifications for industrial robots and their standardized components. The program for the agreement covers the joint development of industrial robots with the modular principle and the organization of cooperative and specialized production and reciprocal supply.

The agreement and the program for microcompressors contain an objective assessment of the achievements of commonwealth nations in this field and indicate the necessity of conducting a unified technological policy for developing the branch, including the unification and standardization of technological and program decisions providing for the extensive exchange of finished items among the CEMA nations. The program calls for the development of more than 110 diverse microprocessor systems for all sectors of the national economy; an exchange of experience in their employment and the development of training plans and programs for preparing personnel; the creation of standard training rooms, the issuing of training literature, and so forth.

A great deal of attention is being devoted to the food problem. For the current 5-year period it is planned to design animal husbandry complexes, develop mechanized technologies for obtaining milk from new and highly productive breeds of cattle, develop and adopt high-yielding varieties of forage crops, and so forth.

These are just a few of the important problems being resolved jointly by scientific organizations of the fraternal nations. Applying the advantages of international socialist division of labor, they make an important contribution each year to the further development of the national economies of all the CEMA nations.

Let us take a look at Bulgaria's participation in multilateral scientific research plans in 1982.

Under the program for the problem "The Conversion of Solar Energy" the production of low-inertia photoresistors with differentiated outcome, and a plastic water receptacle with a stabilized polyvinylchloride base for general use has been started in Bulgaria; 30 air receptors have been manufactured and are presently undergoing testing; series production of the Tsv-500 zinc air cell, which has a capacity of 500 ampere-hours and is designed for use in naval signal installations, has been organized, and so forth.

Substantial results have been achieved in the problem "Protecting Metals from Corrosion." Automatic machines and complimentary equipment for the total mechanization of shops and sections for producing galvanic coatings, as well as a number of highly effective inhibitors, have been developed: for etching on ferrous metals in inorganic acids, corrosion inhibitors for industrial cooling systems, and others. The AFG-1 filters, the PUA-1 microcompressor control system, the BK-type bell for galvanic baths, and so forth, have been developed and adopted for use. Experimental models of a device for painting in an electrical field, manual and automatic air-type paint sprayers, and other items, have been produced and are slated for adoption.

A great deal has been done toward the development of new technologies and equipment for welding, hard-facing and cutting metals. Technologies have been developed for the plasma cutting of steel, for the automated microplasma welding of water pump walls, for extending the service life of runner blades in foundry work, and so forth. A unit has been created out of the PU-400 power supply unit for industrial robots used in welding. It has the Optimatik programed control system for welding with automatic adjustment of the current and heat supply. It will be used mainly for robotized systems with a torch manipulating device with anthropomorphized kinematics. A technology has been adopted for welding plastic pipe at high temperatures, an experimental model of a current supply source for arc welding has been prepared, and so forth.

Under the project "Improving the Nutritional Value of Existing Types of Food Products and the Development of New Types," the following have been placed into production: new dietetic meat products for people suffering from deceases of the gallbladder, the liver or the endocrine system; low-calorie foods for overweight children; new types of fruit drinks, purees and creams for increasing the pectin content, and so forth.

Active cooperation in the field of plant protection continues under the project "The Creation of New Types of Pesticides." The main trend in this field involves the use of biological preparations which are less toxic and with selective action.

Our nation achieved these impressive results in 1982 alone. They are convincing proof of the fact that socialist economic integration among the CEMA nations is an important factor in the acceleration of scientific and technological progress.

Today, our economy is faced with new and difficult tasks involved in further improving the functioning of the Council for Economic Mutual Assistance. The task of "supplementing planned coordination with agreement of the economic policy as a whole," which was set forth at the 26th CPSU Congress, means that we must work out a coordinated scientific and technological policy as a component of general economic policy. It includes the following:

--improving the economic planning machinery for scientific and technological cooperation, including the creation of forms and methods for considering the economic interests of the participating nations, and increasing their interest and responsibilities;

--focusing attention on priority problems, the resolution of which will assure a drastic improvement in the technical level, the quality and the competitive ability of manufactured good produced by the CEMA nations;

--creation of the economic and organizational preconditions for the accelerated adoption and application of the results of joint development projects, primarily on the basis of production specialization and cooperation;

--equalizing the structures of the fraternal nations' management systems, the further development of direct ties between ministries, associations and enterprises participating in the cooperative effort, the creation of joint forms of cooperation, and so forth.

The accomplishment of these tasks will make a significant contribution to the social and economic development of the fraternal nations. The socialist community bears historical responsibility for the creation of conditions conducive to accelerating scientific progress and to the rapid and timely application of the achievements. The steady improvement of the integration processes and the implementation of a unified scientific and technological policy which takes into account the interests both of each separate nation and of the commonwealth as a whole have a large role in this matter.

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USSR-CEMA TRADE

BOOK DISCUSSES CEMA SCIENTIFIC, TECHNOLOGICAL PLANNING

Moscow MEZHDUNARODNAYA ZHIZN' in Russian No 11, Nov 83 (signed to press 19 Oct 83) p 135

[Review by Doctor of Economic Sciences Professor F. Shevyakov of the book "Planirovaniye nauchno-tehnicheskogo progressa v stranakh-chlenakh SEV" (The Planning of Scientific and Technological Progress in the CEMA Nations) by B. P. Krasnoglagov, Moscow, Ekonomika, 1982, 176 pages]

[Text] The main purpose of this book, as defined by the author himself, is to attempt to define the place, the role and importance of the national planning of scientific and technological progress (NTP) in economic and scientific and technological cooperation among the CEMA nations and in their management system; to trace the interrelationship between it and their joint planning work; and to describe individual forms and methods of planning and its organizational structure, and guidelines for their improvement. The author begins his discussion of the subject with an analysis of the work performed by the CPSU and the governing parties of the other CEMA nations with respect to the organization and the planned direction of scientific and technological progress in various stages of their historical development.

The author raises the issue of increasing the degree of concentration of planning work in the development of science and technology. He correctly states that the upper planning levels should be freed of those functions which previously (10-15 years ago) unquestionably should have been under their authority and that these functions should be transferred to lower levels, concentrating the efforts of the higher levels on newly arising, complex questions. There must be a precise delimitation of functions, authority and responsibility in the process of planning scientific and technological progress at the national and international level. This is one of the most complex practical matters, which the author believes has received absolutely inadequate attention up to this point (pages 20-21).

From this standpoint B. Krasnoglagov correctly points out that we must make fuller use of our own extensive experience and that of the fraternal nations. It is in precisely this area, in his opinion, that we need to seek answers to questions arising in the area of the planning of scientific and technological progress and find forms imminently inherent in the socialist way of production.

The book describes the structure and the main functions of the most important agencies performing the planning of scientific and technological progress in the CEMA nations. Special mention should be made of the author's attempt to analyze the comprehensive nature of the planning, the combining of plans for scientific and technological progress at the branch and territorial levels, and the role of local self-governing agencies in the planned acceleration of scientific and technological development within the framework of the operations under their jurisdiction.

The author has attempted to show the interrelationship between the national systems for the planning of scientific and technological progress and the joint planning work of the CEMA nations. He directs attention to the fact that the CEMA nations' entry into the present, qualitatively new stage of development increases the demands made of the theoretical and practical planning of scientific and technological progress both within the state and jointly. The monograph notes that the coordinating activities of these CEMA nations are in substance and form increasingly becoming a continuous process of collaboration among their planning agencies at various levels and in all the stages of long- and medium-range and current planning, thereby turning into a smoothly functioning, unified international system of coordination of the plans for scientific and technological progress.

The book describes new forms of international coordination of plans for scientific and technological progress among the CEMA nations. It describes in special detail the joint planning of new production units.

It should be noted that the book describes existing systems for the planning of scientific and technological progress in the CEMA nations, their specific and general features and ways of bringing them closer together. A number of questions are not adequately illuminated (specifically, the matter of the relative compatibility of specific systems with technological innovations), however, or are only presented in debatable form.

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## USSR-EAST EUROPE BILATERAL TRADE

### USSR-GDR COOPERATION IN ENERGY, MACHINERY, CONSTRUCTION SUMMARIZED

Moscow EKONOMICHESKAYA GAZETA in Russian No 8, Feb 84 p 21

[Article by Yu. Medvekov, executive secretary of the Soviet part of the Intergovernmental Commission for Economic and Scientific-Technical Cooperation Between the USSR and the GDR: "On the Course of Specialization and Cooperative Action in Production"]

[Text] Four years have passed since the Program for the Specialization and Cooperative Action in Production between the USSR and the GDR [East Germany] was signed in late 1979. As applicable to the complicated economic processes, of course, this is a short period of time. But within that period of time in a number of areas one has seen the manifestation of the effectiveness of the Program in developing bilateral cooperation between our countries in the resolution of the important tasks that are aimed at increasing the effectiveness of social production.

As is generally known, the program determined the chief content of our economic cooperation in the sphere of material production. On its basis the branch ministries and other agencies and departments of both countries coordinate the practical measures in specialization and cooperative action for purposes of increasing the effectiveness of the specific production sectors at plants and factories and in the shops. All the measures have been grouped into 35 basic areas of specialization and cooperative action -- by various branches and subbranches of the national economy.

One of the chief tasks for the current decade, as determined by the Program, is the need to improve the structure of production in specific branches with a consideration of the requirements of scientific-technical progress and the specific conditions for each contracting side. Proceeding from this task, within the framework of the Intergovernmental Commission for Economic and Scientific-Technical Cooperation Between the USSR and the GDR the appropriate bilateral agreements have been and are being concluded.

For example, the measures that have been stipulated in the chemical industry by such agreements are influenced first of all by the extreme limitation of the petroleum and gas resources in the GDR. At the same time the GDR has potential opportunities for the production of chemical products that do not require a large amount of energy, but that require the use of multistage

technological processes, as well as chemical equipment with an extremely broad products list. On the other hand, the national economy of the Soviet Union needs a considerable quantity of complicated chemical products, and various types of equipment for that branch.

With a consideration of this fact, an agreement has stipulated, on the one hand, the expansion of the production in the USSR of such energy-intensive products as ammonia and methanol, with a consideration of East German needs, and, on the other hand, the expansion of production in the GDR of less energy-intensive products that require a deeper processing of chemical raw materials, for example, means to combat agricultural pests. By the present time some of the necessary capacities have already been created. Mutually advantageous shipments of chemical articles that have been manufactured in the USSR or the GDR have been begun, as a result of the conducting of the appropriate changes in the structure of production.

The ever-growing need for the progressive reorganization of the structure of the fuel and energy balance sheet is well known. This question is very acute, for example, in transport, where the bulk of the internal combustion engines operate on only the light petroleum products -- the most expensive types of liquid fuel. The USSR and the GDR have coordinated cooperation in converting some of the trucks that require gasoline to a considerably cheaper type of fuel -- compressed natural gas. Within relatively short periods of time, the joint efforts have resolved all the technical questions and the setting up of filling stations has been begun.

Joint operations for the progressive change in the structure of consumption are also being carried out in other branches of the national economy. In each instance, cooperation makes it possible to resolve the problem more quickly and more effectively than when that work was carried out in an uncoordinated manner. Here is an additional example -- from the area of the production of special grades of paper and cardboard. An increase in the needs in both countries for the most varied special types of paper as a result of the development of electronic computers, teletype communication, and control and regulation systems with print-out devices has required the continuous expansion of the production of a large number of special types of paper. This task is also being resolved to a considerable degree on the basis of specialization, and at the present time the annual exchange of varieties of paper between the USSR and the GDR has exceed 100,000 tons, considerably increasing the effectiveness of the appropriate links in the paper-making industry.

The Program and a number of the branch basic directions of specialization and cooperative action stipulate the raising of the concentration of certain specific production entities to a level that guarantees the optimal series production of output, and the introduction on that basis of highly effective technological processes. As a result, for example, the effectiveness of the manufacture of industrial fittings at a number of plants in the USSR and the GDR has exceeded a factor of 1.2-2. There has been an increase in the effectiveness of the manufacture of a number of types of metal-cutting machine tools, electronic elements and technological quipment for their production, equipment for railroad cars, and chemical and other equipment. The division

between the USSR and East German enterprises of the production of certain working tools for knitting machines (knitting needles and beds) has made it possible on a realistic basis to convert their manufacture to highly automated lines, which, incidentally, also are manufactured on the basis of cooperative actions, and to achieve on that basis a considerable reduction of the costs and an increase in the quality of the articles.

Cooperation on the basis of specialization and cooperative action in production is already yielding definite results in the area of the economizing of fuel and raw and other materials. In particular, cooperation made it possible in 1982, at 11 glass furnaces in the USSR, to reduce the fuel expenditure by 8-10 percent and to reduce the breakage of glass articles during the conducting of their chemical polishing by 3-5 percent. Joint efforts have developed new designs of trolleys that feed the articles to tunnel furnaces for firing in the brick, glazed pottery, ceramic, and a number of other branches of industry, and this makes it possible to reduce the expenditure of refractories by 25 percent, to reduce heat losses by 10-15 percent, and to reduce the labor intensity by one-half.

For the needs of civil and industrial construction, joint efforts have developed and tested, and are introducing into the practice of construction, non-cantilever columns with prestressed armature 12.3 meters in length and beams with a span of 18 meters. The application of these building elements makes it possible to reduce the expenditure of steel respectively by 20 and 10 percent, and concrete by 10 and 15 percent, and the labor expenditures during the production of this output are reduced by 10 percent.

Significant results have also been achieved in other branches.

A large amount of attention is being devoted to questions of the use of the opportunities for specialization and cooperative action for developing the production of electronic elements and the equipment for their manufacture, and also to questions of the application of electronics in the most diverse areas of the national economy. Especially tangible results are being provided by cooperative action in the area of the production of high-quality equipment for the manufacture of microelectronic equipment with the use of the most progressive technological processes.

Cooperation in the area of electronics contributes to the rapid growth of the volumes of production of articles in the electronic industry. Whereas in 1976, that is, prior to the adoption of the Program for the Specialization and Cooperative Action in Production, the GDR produced electronic articles with a total value of only several million marks, at the present time the value of those elements that are produced is more than a billion marks. By 1985 the volume of production will increase to almost 3 billion marks.

Simultaneously there has been a considerable expansion in the products list. That list also includes new designs. There has been an increase in the number of assimilated technological processes, and this makes it possible to enrich the products list in the electronic industry in conformity with the current needs of industry. On that basis, both countries are developing the production of electronic devices, electronic computers, radio receivers, television

receivers with highly integrated microcircuits, and provision is being made for the production of machine tools, presses, assembly conveyors, and devices with built-in microelectronic control systems.

A very important part of the Program is the section that mentions the most desirable forms and methods of cooperation. They include, in particular, the development of highly effective production capacities that operate with the maximum use of the opportunities afforded by the introduction of the latest technological processes. That section also emphasizes the need for the intensification of production, and for increasing the efficiency of the existing capacities. These forms and methods of cooperation are already finding broad application in the remodeling of the enterprises that manufacture consumer goods.

The Program for Specialization and Cooperation Action in Production Between the USSR and East Germany is gathering momentum. A lot more remains to be done. But already its contribution to increasing the effectiveness of a number of branches of the national economy in our countries would be hard to overestimate.

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## USSR-EAST EUROPE BILATERAL TRADE

USSR-GDR TRADE PROTOCOL COVERS FUELS, COLOR TV TUBES, AUTOMOBILES

Moscow EKONOMICHESKAYA GAZETA in Russian No 3, Jan 84 p 22

[Unsigned article in column "Foreign Economic Relations": "USSR-GDR: 14 Billion Rubles in Trade"]

[Text] In Moscow on 29 December, negotiations were successfully completed between USSR and GDR government trade delegations, and a protocol on the reciprocal deliveries of goods between the two countries for 1984 was signed.

During preparation of the protocol, the two sides were guided by decisions of the 26th CPSU Congress and the 10th United Socialist Party (SED) Congress of the GDR, as well as by arrangements reached at meetings of the leadership of the fraternal parties and countries.

The mutual delivery of goods for 1984, provided for by the protocol, was agreed upon taking into consideration obligations resulting from a trade and payments agreement between the USSR and the GDR for the period 1981-1985, as well as other agreements in the area of economic collaboration included in the long-range development program for production specialization and cooperation between the two countries, as well as on the basis of the integrated, multilateral plan of measures agreed upon by the CEMA member countries for 1981-1985.

The Soviet Union and the German Democratic Republic have for many years been each others strongest trade partners. In 1984, the volume of trade between the USSR and the GDR exceeded 14 billion rubles.

In 1984, the USSR will continue to supply the GDR with basic types of fuel, energy and raw-material goods, and materials which have important significance in insuring the planned development of the republic's economy. Among those are petroleum and petroleum products, natural gas, ferrous and nonferrous metals, ferriferous raw materials and other goods.

The following will be supplied in larger quantities than in the previous year: machine tooling equipment, microelectronics manufactures, nonferrous kinescopes, freight and passenger automobiles, machinery and equipment for various branches of the economy, as well as technological goods for domestic consumption (refrigerators, watches, tape recorders, cameras, radio receivers, televisions and other items) facilitating a more complete saturation of the GDR domestic market.

Machinery and equipment, including transport equipment required for startup facilities and building sites of the current 5-year plan, will occupy an important place among 1984 imports from the GDR to the USSR. In 1984, the GDR will supply the entire equipment for 2 high-production rolling mills for metallurgical plants to be built in Moldavia and the Far East, 63 metal working lines, more than 1,400 highly automated special machine tool benches and processing centers which will be used, in particular, for reconstruction of enterprises in the motor vehicle and tractor, automobile and electronic industries and agricultural machinery plants. A supply of large bucket wheel excavators from the GDR for the Ekibastuz Coal Basin is envisaged.

The supply will continue from the GDR of transport-hoisting equipment (portal, rail and erecting cranes); railroad rolling stock; computer technology equipment; equipment for microelectronics and various instruments.

The protocol provides for an increase in the supply of machinery, equipment and materials destined for use by the USSR Food Program--in particular, agricultural machinery.

GDR supplies also include products of the highly developed chemical industry of the republic--cinematographic materials, chemicals for plant protection, household chemical products, rich paint and varnish and other products. Supplies provided the USSR by the protocol include a more diverse assortment of consumer goods, with increased quality that will more completely satisfy the demands of the Soviet people for goods of mass consumption.

The reciprocal supplies of goods provided for by the concluded protocol, significant in volume and important from the point of view of domestic requirements, attest to the stable, progressive development in economic co-operation between the USSR and the GDR. The fulfillment of the obligations of the protocol will assist in insuring future planning measures for developing the economy of both countries in the interests of increasing the material welfare of the people.

In the course of negotiations a positive evaluation was given to the state of economic, scientific and technological cooperation; the fulfillment of the Protocol on Trade for 1983, and programs of specialization and cooperation in production between the USSR and the GDR for the period ending in 1990.

The negotiations took place in an atmosphere of friendship, comradely mutual understanding and business cooperation.

The protocol was signed (for the Soviet side) by N. S. Patolichev, minister of foreign trade, and (for the GDR) by Kh. Zelle, minister of foreign trade.

E. Winkelman, GDR ambassador to the USSR, was present at the signing.

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## USSR-EAST EUROPE BILATERAL TRADE

### USSR-ROMANIAN TRADE PROTOCOL INCLUDES RAW MATERIALS, MACHINERY

Moscow EKONOMICHESKAYA GAZETA in Russian No 3, Jan 84 p 22

[Unsigned article in column "Foreign Economic Relations": "USSR-Romania: Growth in Reciprocal Trade"]

[Text] As a result of the successful completion of negotiations between the government trade delegations on 30 December in Moscow, the USSR-SRR Trade Protocol for 1984 was signed.

The protocol provides for further growth in Soviet-Romanian trade. The document is based on the mutual obligations of each side included in a long-term trade agreement between the USSR and Romania for 1981-1985 and other economic agreements for 1984.

During 1984, the USSR will continue to supply the SRR with raw materials: metallurgical coke and coking charges, coal, pig iron, rolled ferrous and nonferrous metals, ferriferous raw materials, cotton, chemical and other goods; goods built in the USSR with SRR collaboration within the framework of the integrated agreements guided by the CEMA objectives: natural gas, ferroalloys, cellulose, asbestos, as well as traditional types of machines and equipment (machine tools, shaft furnace equipment, vessel and vessel equipment, aviation technology, etc.).

The SRR, as in past years, will supply the USSR with a wide list of machines and equipment. A significant quantity will be allocated to petroleum refining equipment, agricultural equipment, grain carrying freight cars and other Romanian goods necessary for an agricultural industrial complex. Great weight in the Romanian exports will be given to consumer goods and chemical products.

The reciprocal supplies, named by the protocol, will assist the successful economic development of both countries and increase the effectiveness of production to the greater satisfaction of the populations of both the Soviet Union and Romania. Completion of obligations provided by the USSR-SRR Trade Protocol for 1984 will be the next step on the path of future broadening of Soviet-Romanian economic cooperation.

The negotiations were conducted in a constructive manner, in the spirit of comradely mutual understanding.

The protocol was signed by N.S. Patolichev, USSR minister of foreign trade, and P. Pungan, SSR minister of foreign trade and international economic co-operation.

Present at the protocol signing were E.M. Tyazhel'nikov, USSR ambassador to Romania, and T. Dudash, SRR ambassador to the USSR.

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USSR-EAST EUROPE BILATERAL TRADE

BRIEFS

SHIPS FROM BULGARIA--Two new ships -- the Vera Maretskaya dry-cargo ship and the Rostov-na-Donu container ship -- have been turned over to Soviet customers by the shipbuilders at the Varna Shipbuilding Combine imeni G. Dimitrov. That enterprise, as well as plants in Burgas and Ruse, are currently fulfilling Soviet work orders for ocean-going and river tankers, container ships, floating ship repair shops, and other types of modern ships. The deliveries to our country of output from Bulgarian shipbuilding are being carried out in conformity with contracts between the Sudostroyeniye All-Union Foreign-Trade Association and the Bulgarian Koraboimpeks Foreign-trade Association. [Text] [Moscow EKONOMICHESKAYA GAZETA in Russian No 8, Feb 84 p 21] 5075

PURIFICATION TECHNOLOGY TO CSSR--A woodpulp and paper combine has gone into commission in Czechoslovakia. It was built with the participation of the Soviet Union in the city of Paskov, near Ostrava. The new industrial entity, with a capacity of 200,000 tons of woodpulp a year, was constructed with a consideration of the latest achievements in that branch. All the water consumed by it is purified and reused in production. The wood that arrives at the enterprise is intended not only for the production of woodpulp. The remaining organic substances are used here to produce fodder yeast, and the bark is formed into briquets and burned in stoves. Chemical substances are extracted from the runoff water and reused in production. [Text] [Moscow EKONOMICHESKAYA GAZETA in Russian No 9, Feb 84 p 22] 5075

GDR ELECTRICAL MACHINERY SYMPOSIUM--The East German trade representation in Moscow was the scene of a symposium that was organized by the Electromaschinenbau combine, a very large producer of electrical machinery in East Germany. The task of the symposium, R. Motz, the deputy general director of the combine said at a press conference, is to provide its participants with extensive information about the designs, operating principle, and capabilities of employment of direct-current electrical slave motors for industrial robots, for purposes of increasing the efficiency and automating the production processes. The Electromaschinenbau combine, according to a statement made at the press conference, unites 15 enterprises and currently produces approximately 8.5 million electrical machines a year. Twenty-five percent of the overall volume of output produced by the combine is exported, with 50 percent of the exported output going to the socialist countries. One of the largest consumers of the output of Electromaschinenbau is the Soviet Union, with the enterprises

of which fruitful production ties are developing successfully. A brilliant example of this is provided by the cooperation between the collectives of the Sachsenwerk Plant in Dresden and the Leningrad Elektrosila Association. On the basis of an intergovernmental agreement, those enterprises cooperate during the carrying out of the remodeling and efficiency-improvement of production capacities. The exchange of experience and a socialist competition between individual brigades are in progress. [Text] [Moscow EKONOMICHESKAYA GAZETA in Russian No 10, Mar 84 p 20] 5075

USSR-CSSR TRADE GROWTH--Last year Czechoslovakia occupied second place in the foreign trade of the Soviet Union. During the current year there has been a continuation of the dynamic growth of reciprocal commodity turnover, which will exceed 12 billion rubles. This was reported at a press conference in Moscow by the Czechoslovak trade representative to the Soviet Union, F. Mares. The items of Soviet-Czechoslovak cooperation in our country include the 3000 rolling mill at the Zhdanov Metallurgical Plant imeni Il'ich, which recently produced its first output; the Voroshilovgrad Shoe Association; the leather plant in Yerevan; and breweries in Riga, Ulyanovsk, Irkutsk, and Sterlitamak. There is a broad and varied list of Czechoslovak commodities that are intended for our countries. During the current year we will receive, in particular, approximately 40 million pairs of footwear from Czechoslovakia. Czechoslovakia is continuing to deliver the Avia and Tatra trucks, including the new Tatra-815 model. There has also been an expansion in Czechoslovakia's participation in the resolution of the tasks in the Soviet Food Program. The fraternal country delivers to our country grain elevators (the first has already been put into operation in Uzhgorod), and plants for the production of milk; and shipments of equipment for the agrocomplex have been stipulated. The Czechoslovak ambassador to the USSR, C. Lovetinski, took part in the press conference. B. Rodionov. [Text] [Moscow IZVESTIYA in Russian 27 Jan 84 p 6]

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GENERAL

FOREIGN CURRENCY RATE CHANGES FOR JANUARY COMPARED

January Rates Listed

[Editorial Report] Moscow EKONOMICHESKAYA GAZETA in Russian Number 2, January 1984 on page 24 and Number 4, January 1984 on page 21 carry lists of exchange rates issued by the USSR State Bank entitled "Bulletin of Exchange Rates of Foreign Currencies" as of 1 January 1984 and 16 January 1984 respectively. Rates for January are compared in the table below.

Name of Currency	Exchange Rate in Rubles 1 January	16 January
Australian dollar per 100	71.38	72.91
Austrian schilling per 100	4.07	4.02
Albanian leks per 100	11.94	11.94
Dinars of the Democratic and Popular Republic of Algeria per 100	16.15	16.15
British pounds sterling per 100	113.59	112.44
Argentine pesos per 100	3.46	3.30
Afghan afghanis per 100	1.55	1.55
Belgian francs per 1,000	14.14	13.91
Burmese kyats per 100	9.66	9.66
Bulgarian levs per 100	105.26	105.26
Hungarian forints per 100	5.88	5.88
Dongs of the Socialist Republic of Vietnam per 100	10.47	10.47
Ghanaian cedis per 100	2.65	2.65
Guinea syli per 100	3.29	3.29
Marks of the GDR per 100	31.25	31.25
Deutsche Marks of the FRG per 100	28.79	28.34
Dutch guilders per 100	25.60	25.26
Greek drachmas per 1,000	7.98	7.81
Danish krones per 100	7.95	7.84
Egyptian pounds each	1.14	1.14
Indian rupees per 100	7.46	7.46
Indonesian rupiahs per 1,000	0.78	0.78
Iraqi dinars each	2.56	2.56
Iranian rials per 100	0.90	0.90
Icelandic kronas per 100	2.77	2.77
Spanish pesetas per 1,000	5.01	5.01

Italian lira per 10,000	4.76	4.68
Dinars of the People's Democratic Republic of Yemen each	2.30	2.30
Rials of the Yemen Arab Republic per 100	16.92	16.92
Canadian dollars per 100	63.59	64.28
Yuans of the People's Republic of China per 100	38.98	38.98
Wons of the Democratic People's Republic of		
Korea per 100	69.44	69.44
Cuban pesos per 100	90.00	90.00
Kuwaiti dinars each	2.71	2.71
Lebanese pounds per 100	14.51	14.51
Libyan dinars each	2.68	2.68
Malaysian ringgits per 100	33.92	33.92
Mali francs per 1,000	0.94	0.94
Moroccan dirhams per 100	9.72	9.72
Mexican pesos per 1,000	4.79	4.79
Mongolian tugriks per 100	23.92	23.92
Nepalese rupees per 100	5.34	5.10
New Zealand dollars per 100	51.15	51.15
Norwegian krone per 100	10.19	10.19
Pakistani rupees per 100	5.93	5.75
Polish zloty per 100	2.31	2.31
Portuguese escudos per 1,000	6.04	5.94
Romanian leus per 100	12.05	12.05
Singapore dollars per 100	37.22	37.73
Syrian pounds per 100	20.24	20.24
Somali shillings per 100	5.05	5.05
U.S. dollars per 100	79.10	80.40
Sudanese pounds per 100	58.77	61.84
Tunisian dinars each	1.08	1.08
Turkish lira per 1,000	3.01	2.75
Uruguayan pesos per 100	1.84	1.77
Finnish markkas per 100	13.53	13.53
French francs per 100	9.41	9.27
Czechoslovak korunas per 100	10.00	10.00
Swedish kronas per 100	9.81	9.81
Swiss francs per 100	36.20	35.77
Sri Lanka rupees per 100	3.14	3.14
Ethiopian birrs per 100	37.80	37.80
Yugoslav dinars per 1,000	6.30	6.30
Japanese yen per 1,000	3.38	3.42

#### Certain Currencies Linked

[Editorial Report] Moscow IZVESTIYA in Russian on 16 January 1984 carries on page 6 a list of exchange rates issued by the USSR State Bank entitled "Bulletin of Exchange Rates of Foreign Currencies" as of 16 January 1984. A footnote to the list indicates that several currencies have "mutually coordinated exchange rates for some operations." The currencies so marked are: Albanian leks, Bulgarian levs, Hungarian forints, Dongs of the SRV, Marks of the GDR, Wons of the DPRK, Cuban pesos, Mongolian tugriks, Polish zloty, Romanian leus, and Czechoslovak korunas.

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GENERAL

FOREIGN CURRENCY RATE CHANGES FOR FEBRUARY COMPARED

February Rates Listed

[Editorial Report] Moscow EKONOMICHESKAYA GAZETA in Russian No 6, February 1984 on page 24 and No 9, February 1984 on page 24 carry lists of exchange rates issued by the USSR State Bank entitled "Bulletin of Exchange Rates of Foreign Currencies" as of 1 February 1984 and 16 February 1984 respectively. Rates for February are compared in the table below.

Name of Currency	Exchange Rate in Rubles 1 February	16 February
Australian dollar per 100	73.70	74.32
Austrian schilling per 100	4.02	4.14
Albanian leks per 100	11.94	11.94
Dinars of the Democratic and Popular Republic of Algeria per 100	16.15	16.15
British pounds sterling per 100	112.90	113.72
Argentine pesos per 100	3.09	2.90
Afghan afghanis per 100	1.55	1.55
Belgian francs per 1,000	13.91	14.28
Burmese kyats per 100	9.66	9.66
Bulgarian levs per 100	105.26	105.26
Hungarian forints per 100	5.88	5.88
Dongs of the Socialist Republic of Vietnam per 100	10.47	10.47
Ghanaian cedis per 100	2.65	2.65
Guinea syli per 100	3.29	3.29
Marks of the GDR per 100	31.25	31.25
Deutsche Marks of the FRG per 100	28.51	29.31
Dutch guilders per 100	25.26	25.94
Greek drachmas per 1,000	7.81	7.81
Danish krones per 100	7.84	8.03
Egyptian pounds each	1.14	1.14
Indian rupees per 100	7.46	7.46
Indonesian rupiahs per 1,000	0.78	0.78
Iraqi dinars each	2.56	2.56
Iranian rials per 100	0.90	0.90
Icelandic kronas per 100	2.77	2.77
Spanish pesetas per 1,000	5.01	5.12

Italian lira per 10,000	4.68	4.74
Dinars of the People's Democratic Republic of Yemen each	2.30	2.30
Rials of the Yemen Arab Republic per 100	16.92	15.93
Canadian dollars per 100	64.36	63.45
Yuans of the People's Republic of China per 100	38.98	38.98
Wons of the Democratic People's Republic of Korea per 100	69.44	69.44
Cuban pesos per 100	90.00	90.00
Kuwaiti dinars each	2.71	2.71
Lebanese pounds per 100	14.51	13.38
Libyan dinars each	2.68	2.68
Malaysian ringgits per 100	33.92	33.92
Mali francs per 1,000	0.94	0.94
Moroccan dirhams per 100	9.72	10.02
Mexican pesos per 1,000	4.79	4.79
Mongolian tugriks per 100	23.92	23.92
Nepalese rupees per 100	5.10	5.10
New Zealand dollars per 100	51.15	51.15
Norwegian krones per 100	10.19	10.27
Pakistani rupees per 100	5.75	5.75
Polish zloty per 100	2.31	1.67
Portuguese escudos per 1,000	5.94	5.94
Romanian leus per 100	12.05	12.05
Singapore dollars per 100	37.73	37.73
Syrian pounds per 100	20.24	20.24
Somali shillings per 100	5.05	5.05
U.S. dollars per 100	80.30	79.00
Sudanese pounds per 100	61.84	61.84
Tunisian dinars each	1.08	1.08
Turkish lira per 1,000	2.75	2.75
Uruguayan pesos per 100	1.77	1.71
Finnish markkas per 100	13.53	13.53
French francs per 100	9.32	9.49
Czechoslovak korunas per 100	10.00	10.00
Swedish kronas per 100	9.81	9.75
Swiss francs per 100	35.77	35.93
Sri Lanka rupees per 100	3.14	3.14
Ethiopian birrs per 100	37.80	37.80
Yugoslav dinars per 1,000	6.30	6.35
Japanese yen per 1,000	3.42	3.38

#### Early February Changes

[Editorial Report] Moscow EKONOMICHESKAYA GAZETA in Russian Number 6, February 1984 (signed to press 30 Jan 84) carries on page 24 a 250-word article by Ye. Zolotarenko under the rubic "Our Commentary" which summarizes rate changes and notes that speculation on a higher exchange rate for the U.S. dollar "weakened toward the second half of the month, and the currency markets once again evinced uncertainty regarding the future course of the dollar." The article points out a decline in the rate of the economic growth, indicated by fewer December orders for durable production goods, and a reduction in growth rates for retail trade,

output of industrial production, purchases of personal housing, and "the publication of data on a record foreign trade deficit for 1983: \$69.4 billion as contrasted with \$42 billion in 1982." At the same time, the dollar's rate is said to be supported by high interest rates in the USA, with a market expectation that interest rates on federal funds might increase from 9.5 to 10.5-11 percent. The article indicates that these "contradictory tendencies" resulted in a slight decline of the dollar's rate relative to the FRG mark. In conclusion, it notes that England's currency situation improved due to a better balance of payments and a relative stability in oil prices, and that the price of gold remained around \$370 per ounce.

#### Mid-February Changes

[Editorial Report] Moscow EKONOMICHESKAYA GAZETA in Russian Number 9, February 1984 (signed to press 20 Feb 84) carries on page 24 a 200-word article by Ye. Zolotarenko under the rubric "Our Commentary" which summarizes rate changes and comments on the factors lately tending to decrease the U.S. dollar's exchange rate. The article notes that contributing to an accelerated growth in costs are a "growth in the money supply, the inflationary influence of a huge government budget deficit (close to \$200 billion), and highly unfavorable trade balances (almost \$70 billion) and payments balances (\$42 billion) in 1983. These factors entailed an outflow of some capital and led to a 1.5 percent decline in the dollar's exchange rate." The flow of capital from the USA to the FRG is said to have strengthened the West German Mark and the currencies of other European Currency System countries. The article states that the Japanese yen's value is not greatly affected, because "the yen is basically used for trade computations, and not for operations of a financial character." The article concludes by noting that strengthening of the pound sterling has raised "prospects for a widening market in selling North Sea oil" and that in connection with the weakening U.S. dollar, the cost of gold has increased from \$370 to \$380 per ounce.

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END